



**TOWN OF GRAFTON  
ZONING BOARD OF APPEALS**

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**MINUTES  
ZONING BOARD OF APPEALS  
THURSDAY, JUNE 15, 2023  
IN PERSON MEETING  
AT THE GRAFTON PUBLIC LIBRARY**

2023 SEP - 6 AM 9:45  
RECEIVED TOWN OF GRAFTON  
ZONING BOARD OF APPEALS

A meeting of the Zoning Board of Appeals was held on Thursday, June 15, 2023, in person in the Community Meeting room at the Grafton Public Library.

**Members present:** Brian Waller, William McCusker, William Yeomans, Peter Adams, Mitali Biswas, Jiffy Thomas, Attorney Dan Hill, Robert Berger, Zoning Enforcement Officer, and Jeff Walsh of Graves Engineering.

**Members absent:** Kay Reed

Meeting called to order at 7:08 p.m.

Chairman Waller turns meeting over to Vice Chairman McCusker who will be acting Chairman for this case.

**Case #892 – 59 Pleasant St. Properties, LLC – 40B - Continuation**

Travis Brown of TPC Engineering

- Revised plans submitted with the wetlands flagged
- Revised list of waivers submitted
- Revised architecture plans submitted
- Traffic response to peer review report
- Board comments – emergency access – fire department comments

**Traffic**

Kevin Dandrade – TEC – peer review traffic

- Reviewed applicants report dated 5/26/23 also reviewed all previous ZBA meetings
- Reviewed his report dated 6/15/23 - attached

Board comments/concerns:

- Weight (large/heavy trucks) using Pleasant Street
- Moving trucks coming in and out of the complex – maybe stagger the leases (usually staggered)
- How much traffic will be added by this project
- Discussion of peak traffic times – 7 a.m. – 9 a.m. and 4 p.m. – 7 p.m.

Intersections:

- Discussion of number of cars driving up and down Pleasant Street – 7 cars per minute
- Suggested to add a sidewalk on Pleasant Street – propose to the town
- Signal Study at Providence Road and Pleasant Street
  - A signal warrant analysis – the study of side streets and the traffic
  - Elmwood Street – capacity or safety
- Timeline of traffic signal warrant – need a full 12-hour count
  - Volume – peak warrant
    - 4-hour warrant
    - 8-hour warrant – MADOT prefers
- Safety Review Procedure
  - Warrant averages
  - Corridor safety analysis – in between/bookends

- Explore traffic
- Sidewalks

Review of Kevin Dandrade letter/report (attached)

**Public Comments:**

John Marro – 54 Pleasant Street –

- Did trip counts include delivery trucks or just traffic? - both
- Trucks use as a cut through
- There are mirrors on the corner of Hudson and Pleasant because it is a bad corner

Jason Giguere – 24 Christopher Drive

- Was traffic from the Fisherville Terrace development coming up from Main Street added to the potential traffic increase? – similar trip count as the Pleasant Street project – more traffic heading north
- Concerned of the stone bridge very narrow by Pullard Road – possibly add signs that say “Narrow Bridge” to try and slow people down
- Motor vehicle law – need to give 4' berth to any pedestrian walking in a roadway – very tough on that bridge

Colleen Roy – 53 Elmwood Street

- Support the project
- 3 ways stop at Elmwood
- SGES will also impact traffic on Pleasant

Ken Swirdak – 52 Sunrise Avenue

- Rated F intersection – what rating does it have to have to be declared unsafe
  - If not a 40B – this could not go forward because of the traffic
  - Delay in making left turn makes the intersection an F
- 2 cars per unit – how many using Pleasant Street as an exit during the day (60 trips at peak hour)
- State Representative that lives in town – can we use him to get a light
- Light at Millbury Street – how did we get that one – the Millbury Street school construction

Julie Capuzziello – 34 Pleasant Street

- F rating – study done only on 1 day is that standard operating procedure
  - Have done 2 studies over 2 different years – not much variation in the 2 studies
  - Standard to only look at a couple of days
- Traffic Calming – speed bumps
- Stop signs at each cross street to mitigate traffic – can not be used for traffic calming
- Signage & sidewalks

Lindsay Fawkes – 61 Sunrise Avenue

- Do accident counts look at all crashes at all intersections and along Pleasant Street
  - Current crashes have only been looked at each end but not Pleasant Street as a whole

Scott Novitski – 49 Pleasant Street

- Safety look at width of the entire road, curves of the road, driveways
  - Applicant will look at general safety review, curves/driveways/intersections
- Sight lines from driveways
- Change/increase of traffic – percentage of change and what it will feel like – no metric to measure
- Speed – 43 mph on that road

Eric Solomon – 11 Cheryl Drive

- Any data if adding signage helps control the speed - enforcement

Discussion:

- 43 mph in front of development – average counted at that particular location
- Background trips– Fisherville was not counted – should be included
- Crosswalk – any proposed across Pleasant to Christopher – yes
  - Any signal – no; feels there should be one with a flash beacon

Mr. Yeomans:

- Peer review of surface and groundwater consultant
  - Water resources protection area
  - Additional impact of development on wetlands
- Sewer Department
  - Review and study and peer review
  - Is connection at Christopher Drive and the in street sewer line adequately sized for 104-unit apartment

Items to be completed:

- EcoTech to look at delineation of wetlands and waiver requests
- Ground water quality and impacts – outside of scope of EcoTech
- Scott Horsely – hydrology- impacts on groundwater and ponds – need to have a hydrologist review

Mr. Boardman of Eastland – will get review from Paul Cournoyer – Sewer Dept. and will complete what is asked for.

Discussion regarding storm water – regulations, review, peer review.

Next meeting: continue traffic discussion and environmental impact

Motion made by Mr. Yeomans and seconded by Mr. Waller to continue the hearing on Case #892 to Wednesday, July 19, 2023, at 7:00 p.m. at the Grafton Municipal Center in Conference Room A. On a roll call vote: Mr. Yeomans – yes; Mr. Adams – yes; Mr. Waller – yes; Ms. Biswas – yes; Mr. Thomas – yes, Mr. McCusker – yes. 6-yes, 0-no, meeting continued to Wednesday, July 19, 2023, at 7:00 p.m.

Appeal process has changed – private citizen appealing the decision must put up to \$50,000 bond to appeal. If you lose the appeal, you lose the bond. Judge's discretion to make the person appealing the decision to have them put up a bond. Only if the judge feels the appeal lacks any merit/frivolous.

Motion made by Mr. McCusker and seconded by Mr. Yeomans to continue adjourn meeting. On a roll call vote; Mr. Yeomans – yes; Mr. Adams – yes; Mr. Waller – yes; Mr. McCusker – yes; Ms. Biswas – yes; Mr. Thomas – yes, 6-yes, 0-no, motion passed, meeting adjourned at 9:30 p.m.

Respectfully submitted by Katrina Koshivos

*Kay Reed*

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Kay Reed - Clerk

6/15 minutes

Town of Grafton  
Zoning Board of Appeals  
Attn: Katrina Koshivos, Secretary  
Town Hall / 30 Providence Road  
Grafton, MA 01519

June 13, 2023

**DRAFT**

Ref. T1369

Re: Proposed 40B Residential Development Project – 59 Pleasant Street  
Traffic Engineering Peer Review

Dear Chairman Waller & Members of the ZBA:

On behalf of the Town of Grafton, TEC, Inc. (TEC) has reviewed documents as part of the traffic engineering peer review for a proposed 40B Residential Development at 59 Pleasant Street in Grafton, Massachusetts ("the Project"). The Project consists of constructing 104 residential units on a currently undeveloped parcel. The proposed project proposal includes one (1) new full-access driveway along the easterly side of Pleasant Street approximately 370 feet north of Peter's Way.

The following documents were received as part of our review:

- *Transportation Impact and Access Study – 40B Residential Building - 59 Pleasant Street, Grafton, Massachusetts*; prepared by Greenman-Pedersen, Inc. (GPI), dated May 26 2023.
- *Comprehensive Permit Plan - 59 Pleasant Street, Grafton, Massachusetts*; prepared by Turning Point Engineering, dated February 8, 2023.

TEC completed a review of these documents for the Town of Grafton and provides the following transportation-related comments that we compiled during our review.

### **Traffic Impact Assessment**

1. The Traffic Impact and Access Study (TIAS) included the following intersections within the study area:

- Providence Road (Route 122) at Pleasant Street and Church Street
- Main Street (Route 122A) at Pleasant Street and Leland Hill Road
- Pleasant Street at Proposed Site Driveway

TEC predicts that some portion of the Project-related traffic is likely to travel to/from Elmwood Street via Route 122A and Pleasant Street. Although it is expected to slightly change the trip distribution at the intersection of Route 122A at Pleasant Street and Leland Hill Road, it is not expected to noticeably impact the findings of the TIAS. Although the intersection of Pleasant Street / Elmwood Street does not appear to have any notable capacity constraints, TEC believes this intersection needs to be formally included due to its unique traffic control (3-out-of-4 way stop) and the adjacent at-grade railroad crossing. There are several elements of this intersection that should be closely examined as it relates to the appropriate use of signs and markings.

2. Traffic volume counts, including Turning Movement Counts (TMCs) and Automatic Traffic Recorder (ATR) data, were conducted at the study area intersection at the study area intersections in July 2021 and April 2023 when schools were in session. The recorded volumes for both periods were found to exceed the average monthly conditions based on historical traffic-volume data obtained from Massachusetts Department of Transportation (MassDOT) records spanning 2014-2019, and therefore no seasonal adjustment factors were applied. Adjusted July 2021 traffic volumes were computed using the data provided by MassDOT Continues Count Station Nos. 3178, 3991, and 310, with an average COVID adjustment factor of 2.5% applied. The July 2021 adjusted traffic volumes were then compared to April 2023 and data with higher intersection traffic volumes at each of the study area locations was utilized for analysis. While this approach is conservative, TEC generally prefers using the 2023 data for all the intersections as the 2021 data, although conservative for one location, may represent a slightly different traffic pattern specially for turning movements due to the COVID-19 pandemic. That being said, TEC does not expect a measurable change in the findings of the TIAS. *No response required.*
3. The weekday morning and weekday evening peak commuter hours were studied to determine the project's overall effect on the roadway. TEC concurs that these selected time periods are appropriate for residential land use as the peak hours of the residential developments may overlap with the peak hours of the adjacent street system. *No response required.*
4. The TIAS presents motor vehicle crash data for each of the study area intersections. The crash data indicates the number, type, and severity of crashes at the study area intersections between 2015 and 2019 obtained from MassDOT crash portal and 2017 and 2021 from Grafton Police Department. Notably, the 2020 crashes were not included due to impact of COVID-19 pandemic. With the exception of the intersection of Main Street at Pleasant Street / Leland Hill Road, the intersection crash rates are lower than the MassDOT District 3 and Statewide averages.

The intersection of Main Street at Pleasant Street and Leland Hill Road experienced a higher crash rate compared to MassDOT District 3 and Statewide rates. Analysis of the crash trends revealed that notable number of angle collisions were found as a result of inattention or failure to yield to right of way. The TIAS review of the crash narratives indicates that five of the eleven crashes occurred as a result of vehicles running the stop sign on the Pleasant Street approach with overgrown vegetation being responsible for obstructing the existing "STOP" sign. As part of a MassDOT Reclamation on Route 122A (Main Street), from Providence Road to the Sutton Town Line (MassDOT Project No. 607903), the "Stop" sign is planned to be relocated closer to the roadway to enhance visibility.

TEC recommends that the Applicant include advance signage such as Stop Ahead Sign (MUTCD standard designation W3-1) or intersection Warning sign (MUTCD standard designation W2-1) in advance of the intersection as part of their recommendations to inform drivers of the approaching intersection and the requirement to bring their vehicles to a stop.

5. The background growth rate of 1.0 percent per year was applied to the 2021 and 2023 existing volumes to generate the 2028 and 2030 future year volumes per MassDOT guidelines. The traffic projected to be generated by 136-unit senior living development at 27 Upton Drive was factored in using the annual growth rate of 1 percent. The Applicant did not include 100 duplex units (50 buildings/100 units) at 1119 Main Street in South Grafton, which have been approved by the Town and are currently under construction, in their assessment of background developments. However, TEC predicts an increase of approximately 5 to 10 additional trips per hour on Pleasant Street to/from 119 Main Street project during peak periods and it is not anticipated to noticeably impact the result of the capacity analyses. *No response required.*
6. To properly assess roadway operations and safety, including sight distance, the Applicant utilized the 85th percentile travel speeds along Pleasant Street which is noted to be 43 MPH northbound and 42 MPH southbound in Table 3 of the TIAS (shown 42 MPH for both northbound and southbound in speed measurement data provided in the appendix), that are higher than the posted speed limit of 30 MPH on Pleasant Street. These travel speeds were measured by the ATR in April 2023. The sight distances reported in Table 4 of the TIAS are measured in accordance with the American Association of State Highway and Transportation Officials (AASHTO) requirements. *TEC concurs with this speed assessment.*  
  
The Applicant should commit to maintain proposed plantings, vegetation, landscaping, and signing along the site frontage be kept low to the ground (no more than 3.0 feet above street level) and along the site frontage consistently to ensure that sight lines remain unobstructed at the site driveway intersection with Pleasant Street.
7. Site trip generation calculations for 104 residential dwelling units were generated based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11<sup>th</sup> Edition*, Land Use Code (LUC) 220 – Multifamily Housing (low-rise). TEC generally concurs with this methodology and selection of LUC 220 for low-rise (two or three floors) buildings as the ITE *Trip Generation Manual* is an industry standard and the latest edition was utilized. The traffic generated by the proposed project was reasonably distributed onto the adjacent roadway system based on the Journey-to-work data by the 2011-2015 US Census data for persons living in the Town of Grafton, which is consistent with industry standards for new employment centers. *No response required.*
8. The Build traffic volumes were grown to 2028 and 2030 to cover 7-year planning horizon from time of data collection (2021 and 2023). Specifically, the intersection of Main Street / Pleasant Street / Leland Hill Road was analyzed using the 2021 COVID-adjusted data and evaluated under the conditions projected for 2028. While the 7-year planning horizon aligns with MassDOT Transportation Impact Assessment (TIA) Guidelines, TEC recommend utilizing the same year for Build conditions in 2030. That being said, TEC is not expecting a substantial change in the findings of the TIAS. *No response required.*
9. TEC generally concurs with the results of the capacity and queue analysis provided as part of the TIA utilizing Highway Capacity Manual (HCM) 6<sup>th</sup> Edition methodology for the unsignalized intersections. The Applicant's team should verify that there are no perceived capacity impacts at the intersection of Pleasant Street / Elmwood Street.



10. The TIAS documents long delays and levels of service F for some movements at the intersection of Providence Road at Pleasant Street / Church Street. This intersection has a sweeping channelized right-turn movement onto Pleasant Street. Within the TIAS under future conditions, GPI applied a project-specific critical gap factor to model motorists' use of shorter gaps in traffic exiting Pleasant Street to turn onto Providence Road or Church Street. This analysis modification decreases the effective, calculated delays overall; however, movements on Pleasant Street eastbound approach will continue to operate with levels of service E and F during peak periods. The Applicant is not suggesting any improvements at this important gateway intersection. TEC suggests that the Applicant perform a Traffic Signal Warrant Analysis to review the potential for the installation of a traffic signal under 2030 build conditions. Any improvements at this intersection will need to be reviewed and approved by MassDOT.
11. Considering the absence of pedestrian and bicycle accommodations on Pleasant Street away from the site's frontage, TEC recommends that the Town request a fair-share contribution from the Applicant for a Town-sponsored study to assess the feasibility of establishing sidewalk connections or bicycle facilities along Pleasant Street.

#### **Site Plans**

12. A truck turning analysis should be provided for the Grafton Fire Department design vehicle and a large single-unit (SU) truck (representative of a moving van, trash/refuse truck or similar). The turning analysis should demonstrate that the subject vehicles can access and circulate within the project site in an unimpeded manner. The Applicant should provide a narrative about package deliveries. TEC recommends a dedicated loading area for package delivery services in a central location, such as the Leasing Office, or a well-defined area adjacent to each building that does not impact parking or emergency access. This same area may be identified for tenant move-in/move-out operations.
13. The Applicant should indicate an area for visitor parking near the leasing office and near the main entrance for each building.
14. Vehicles exiting the Project site should be placed under STOP-sign control with a marked STOP-line meeting the requirements of the MUTCD.
15. The sight triangle areas for the site driveway intersection with Pleasant Street should be shown on the Site Plans along with a note to indicate: "Signs, landscaping and other features located within sight triangle areas shall be designed, installed, and maintained so as not to exceed 2.5- feet in height. Snow windrows located within sight triangle areas that exceed 3.5-feet in height or that would otherwise inhibit sight lines shall be promptly removed."
16. A note should be added to the Site Plans stating the following: "All Signs and pavement markings to be installed within the Project site shall conform to the applicable specifications of the Manual on Uniform Traffic Control Devices (MUTCD)."
17. Dumpster enclosures are located in the northeast and southeast corners of the site. The refuse truck movements should be reflected in the truck turning analysis.

18. The Site Layout and Materials Plan (C-3.0 in the Plan Set) indicates that a total of 204 parking spaces are provided within the site. TEC confirmed a total of 204 spaces provided on the Site Plan adjacent to these buildings. The TIAS mentioned 213 parking spaces will be provided on site. The Applicant should clarify their final number of parking spaces. The Applicant provided ITE Parking Generation data with weekday average and Saturday average parking demand that equates to 126 and 136 parking spaces, respectively. ITE's data also suggests that the 85<sup>th</sup> Percentile rates for this land use ranges from 1.52 to 1.61 spaces per residential unit. Based on TEC's experience with suburban residential projects, a parking ratio of greater than 1.75 stalls per unit (currently at 1.96 stalls per unit) will provide a supply that can easily satisfy the normal demands for a project of this scale and should be considered a reasonable waiver of the Town's requirements.

Please do not hesitate to contact me or Rana Eslamifard directly if you have any questions concerning this peer review at 978-794-1792. Thank you for your consideration.

Sincerely,  
TEC, Inc.  
"The Engineering Corporation"



Kevin R. Dandrade, P.E., PTOE  
Principal